

**REGULATION 8  
ORGANIC COMPOUNDS  
RULE 10  
PROCESS VESSEL DEPRESSURIZATION**

**INDEX**

**8-10-100 GENERAL**

- 8-10-101 Description
- 8-10-110 Exemption, Equipment Subject to Other Rules ~~Storage Vessels~~
- ~~8-10-111 Exemption, Chemical Plants~~

**8-10-200 DEFINITIONS**

- 8-10-201 Chemical Plant
- 8-10-202 Petroleum Refinery
- 8-10-203 Process Unit
- 8-10-204 Process Vessel
- 8-10-205 Total Organic Compound

**8-10-300 STANDARDS**

- 8-10-301 Limit ~~Process Vessel Depressurizing~~

**8-10-400 ADMINISTRATIVE REQUIREMENTS (Not included)**

- ~~8-10-401 Turnaround Records~~
- ~~8-10-402 Increments of Progress~~

**8-10-500 MONITORING OF AND RECORDS (Not included)**

- 8-10-501 Monitoring
- 8-10-502 Records
- 8-10-503 Reporting

**8-10-600 MANUAL OF PROCEDURES (Not included)**

- 8-10-601 Emission Monitoring

**REGULATION 8  
ORGANIC COMPOUND  
RULE 10  
PROCESS VESSEL DEPRESSURIZATION**

**8-10-100 GENERAL**

**8-10-101 Description:** The purpose of this Rule is to limit emissions of total precursor organic compounds from venting process vessels to the atmosphere depressurization at petroleum refineries and chemical plants. (Amended 3/17/82, 7/20/83, xx/xx/xx)

**8-10-110 Exemption, Equipment Subject to Other Rules ~~Storage Vessels~~:** The requirements of Section 8-10-301 shall not apply to stationary containers used solely for the storage of an organic liquid. The provisions of this rule shall not apply to vessels that are subject to the following Regulation 8 rules:  
110.1 Regulation 8, Rule 5, Storage of Organic Liquids.  
110.2 Regulation 8, Rule 24, Pharmaceutical And Cosmetic Manufacturing Operations.  
110.3 Regulation 8, Rule 35, Coating, Ink And Adhesive Manufacturing.  
110.4 Regulation 8, Rule 36, Resin Manufacturing.  
110.5 Regulation 8, Rule 41, Vegetable Oil Manufacturing Operations.  
110.6 Regulation 8, Rule 50, Polyester Resin Operations.  
110.7 Regulation 8, Rule 52, Polystyrene, Polypropylene And Polyethylene Foam Product Manufacturing Operations.

(Amended xx/xx/xx)

~~**8-10-111 Exemption, Chemical Plants:** The provisions of Section 8-10-301 shall not apply to chemical plants until January 1, 1985. (Adopted 7/20/83) (~~Deleted xx/xx/xx~~)~~

**8-10-200 DEFINITIONS**

**8-10-201 Chemical Plant:** Any facility engaged in producing organic or inorganic chemicals and/or manufacturing products by chemical processes. Any facility or operation that has 28 as the first two digits in their Standard Industrial Classification Code as determined from the Standard Industrial Classification Manual published in 1972 by the Executive Office of the President, Office of Management and Budget. Chemical plants may include, but are not limited to the manufacture of: industrial inorganic and organic chemicals; plastic and synthetic resins, synthetic rubber, synthetic and other man made fibers; drugs; soap, detergents and cleaning preparations, perfumes, cosmetics and other toilet preparations; paints, varnishes, lacquers, enamels and allied products; agricultural chemicals; safflower and sunflower oil extracts; re-refining. (Adopted 7/20/83)

**8-10-202 Petroleum Refinery:** ~~Any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants or other products through distillation of petroleum or through redistillation, cracking, rearrangement or reforming of unfinished petroleum derivatives.~~ A facility that processes petroleum, as defined in the North American Industrial Classification Standard No. 32411 (1997).

(Adopted 7/20/83, Amended xx/xx/xx)

**8-10-203 Process Unit:** A manufacturing process which is independent of other processes and is continuous when supplied with a constant feed of raw materials and sufficient storage facilities for the final product. (Adopted 7/20/83)

**8-10-204 Process Vessel:** Any vessel in which organic compounds are fractionated ~~on more than one tray or on packing, or chemically reacted, or washed or purified.~~ These vessels include reactors, columns, accumulator vessels, knockout pots, surge/settling drums and other similar devices that are greater than 10 cubic feet (ft<sup>3</sup>).

(Renumbered 7/20/83, Amended xx/xx/xx)

**8-10-205 Total Organic Compounds:** All organic compounds of carbon including methane, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate, that would be emitted to the atmosphere.  
(Adopted xx/xx/xx)

## 8-10-300 STANDARDS

**8-10-301 ~~Limit~~Process Vessel Depressurizing:** ~~The control of precursor organic compounds emissions from depressurizing any~~ A process vessel at a petroleum refinery or a chemical plant during a process unit turnaround shall ~~not~~ be ~~vented to the atmosphere~~ accomplished so that the, after passing through a knockout pot to remove the condensable fraction, must either be ~~unless the total~~ organic compounds ~~prior to release to the atmosphere are reduced to a concentration of less than 10,000 parts per million (ppm), expressed as methane (C<sub>1</sub>).~~

~~301.1 Recovered (add to the fuel gas system) and combusted,~~

~~301.2 Controlled and piped to an appropriate firebox or incinerator for combustion,~~

~~301.3 Flared,~~

~~301.4 Contained and treated so as to prevent their emissions to the atmosphere. Such procedures shall continue until the pressure within the process vessel is as close to atmospheric pressure as practicably possible, in no case shall a process vessel be vented to the atmosphere until the partial internal pressure of organic compounds in that vessel is less than 1000 mm Hg (4.6 psig).~~

(Amended 3/17/83, 3/20/83, xx/xx/xx)

## 8-10-400 ADMINISTRATIVE REQUIREMENTS

**8-10-401 ~~Turnaround Records:~~** ~~Refinery personnel shall keep records of each process unit turnaround, listing as a minimum:~~

~~401.1 The date of unit shutdown and/or depressurizing,~~

~~401.2 The approximate process vessel hydrocarbon concentration when the organic emissions were first discharged into the atmosphere, and~~

~~401.3 The approximate quantity of total precursor organic compounds emitted into the atmosphere. These records shall be kept for at least two (2) years and be made available to the APCO during any compliance inspection.~~

(Amended 3/17/82, 7/10/83)

**8-10-402 ~~Increments of Progress:~~** ~~A person who must modify existing sources or install new control equipment at chemical plants to comply with the requirements of this Rule shall comply with the following compliance schedule:~~

~~402.1 January 1, 1984: Submit to the APCO final control plan which describes, as a minimum, the steps, including a construction schedule, that will be taken to achieve compliance with such requirements.~~

~~402.2 July 1, 1984: Submit a completed application for any Authority to Construct necessary to achieve compliance with such requirements.~~

~~402.3 January 1, 1985: Be in compliance with all the requirements of this Rule.~~

(Amended July 20, 1983)

## 8-10-500 MONITORING AND RECORDS

**8-10-501 Monitoring:** Any vessel subject to this rule shall be monitored for the concentration of total organic compounds prior to opening and once per day during the time the vessel is open to the atmosphere. The sample shall be a representative sample of the internal atmosphere of the vessel.

(Adopted xx/xx/xx)

**8-10-502 Records:** Any facility subject to the provisions of this rule shall keep records of each vessel depressurization. The records shall include the following information:

- 502.1 The date, time, and duration of depressurization,
- 502.2 The type of service, size and name or vessel identification number,
- 502.3 The measured total organic compound concentration and calculated mass emissions from each depressured vessel,
- 502.4 The number and size of any air movers used to assure compliance with confined space entry requirements.
- 502.5 Records shall be maintained for at least 5 years and shall be made available to the APCO for inspection at any time.

(Adopted xx/xx/xx)

**8-10-503 Reporting:** Any facility subject to the provisions of this rule shall submit a monthly report to the Air Pollution Control Officer (APCO) containing the elements of Section 8-10-502.

(Adopted xx/xx/xx)

**8-10-600 MANUAL OF PROCEDURES**

**8-10-601 Emission Monitoring:** The meter used to measure the concentration of total organic compound emissions shall meet the accuracy requirements of EPA Method 21.